

**22.1(455B) Permits required for new or existing
stationary sources.**

22.1(1) *Permit required.* Unless exempted in subrule 22.1(2) or to meet the parameters established in paragraph "c" of this subrule, no person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to 22.8(455B), or permits required pursuant to 22.4(455B) and 22.5(455B) as required in this subrule. A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon.

a. Existing sources. Sources built prior to September 23, 1970, are not subject to this subrule, unless they have been modified, reconstructed, or altered on or after September 23, 1970.

b. New or reconstructed major sources of hazardous air pollutants. No person shall construct or reconstruct a major source of hazardous air pollutants, as defined in 40 CFR 63.2 and 40 CFR 63.41 as amended through December 27, 1996, unless a construction permit has been obtained from the department, which requires maximum achievable control technology for new sources to be applied. The permit shall be obtained prior to the initiation of construction or reconstruction of the major source.

c. New, reconstructed, or modified sources may initiate construction prior to issuance of the construction permit by the department if they meet the eligibility requirements stated in subparagraph (1) below. The applicant must assume any liability for construction conducted on a source before the permit is issued. In no case will the applicant be allowed to hook up the equipment to the exhaust stack or operate the equipment in any way that may emit any pollutant prior to receiving a construction permit.

(1) Eligibility.

1. The applicant has submitted a construction permit application to the department, as specified in subrule 22.1(3);

2. The applicant has notified the department of the applicant's intentions in writing five working days prior to initiating construction; and

3. The source is not subject to rule 567-22.4(455B), 567-subrule 23.1(2), 567-subrule 23.1(3), 567-subrule 23.1(4),

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567-subrule 23.1(5), or paragraph "b" of this subrule. Prevention of significant deterioration (PSD) provisions and prohibitions remain applicable until a proposed project legally obtains PSD synthetic minor status (i.e., obtains permitted limits which limit the source below the PSD thresholds).

(2) The applicant must cease construction if the department's evaluation demonstrates that the construction, reconstruction or modification of the source will interfere with the attainment or maintenance of the national ambient air quality standards or will result in a violation of a control strategy required by 40 CFR Part 51, Subpart G, as amended through August 12, 1996.

(3) The applicant will be required to make any modification to the source that may be imposed in the issued construction permit.

(4) The applicant must notify the department of the date that construction or reconstruction actually started. All notifications shall be submitted to the department in writing no later than 30 days after construction or reconstruction started. All notifications shall include all of the information listed in 22.3(3) "b."

22.1(2) *Exemptions.* The provisions of this rule shall not apply to the following listed equipment or control equipment. If review of the equipment or the control equipment is necessary to comply with rule 22.4(455B), prevention of significant deterioration requirements; rule 22.5(455B), special requirements for nonattainment areas; 567-subrule 23.1(2), new source performance standards (40 CFR Part 60 NSPS); 567-subrule 23.1(3), emission standards for hazardous air pollutants (40 CFR Part 61 NESHAP); 567-subrule 23.1(4), emission standards for hazardous air pollutants for source categories (40 CFR Part 63 NESHAP); or 567-subrule 23.1(5), emission guidelines, the exemption does not apply and a permit must be obtained. If equipment is permitted under the provisions of rule 22.8(455B), then no other exemptions shall apply to that equipment.

Records shall be kept at the facility for exemptions that have been claimed under the following paragraphs: 22.1(2) "a" (for equipment > 1.0 MMBTU/hour), 22.1(2) "b," 22.1(2) "e," 22.1(2) "r" or 22.1(2) "s." The records shall contain the following information: the specific exemption claimed and a description of the associated equipment. These records shall be

made available to the department upon request. The following paragraphs are applicable to 22.1(2) "g" and "i." A facility claiming to be exempt under the provisions of paragraph "g" or "i" shall provide to the department the information listed below. If the exemption is claimed for a source not yet constructed or modified, the information shall be provided to the department at least 30 days in advance of the beginning of construction on the project. If the exemption is claimed for a source that has already been constructed or modified and that does not have a construction permit for that construction or modification, the information listed below shall be provided to the department within 60 days of March 20, 1996. After that date, if the exemption is claimed by a source that has already been constructed or modified and that does not have a construction permit for that construction or modification, the source shall not operate until the information listed below is provided to the department:

- A detailed emissions estimate of the actual and potential emissions, specifically noting increases or decreases, for the project for all regulated pollutants (as defined in 22.100(455B)), accompanied by documentation of the basis for the emissions estimate;
- A detailed description of each change being made;
- The name and location of the facility;
- The height of the emission point or stack and the height of the highest building within 50 feet;
- The date for beginning actual construction and the date that operation will begin after the changes are made;
- A statement that the provisions of rules 22.4(455B) and 22.5(455B) do not apply; and
- A statement that the accumulated emissions increases associated with each change under paragraph 22.1(2) "i," when totaled with other net emissions increases at the facility contemporaneous with the proposed change (occurring within five years before construction on the particular change commences), have not exceeded significant levels, as defined in 40 CFR 52.21(b)(23) as amended through March 12, 1996, and adopted in rule 22.4(455B), and will not prevent the attainment or maintenance of the ambient air quality standards specified in

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567-Chapter 28. This statement shall be accompanied by documentation for the basis of these statements.

The written statement shall contain certification by a responsible official as defined in rule 22.100(455B) of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

a. Fuel-burning equipment for indirect heating and reheating furnaces or cooling units using natural gas or liquefied petroleum gas with a capacity of less than ten million Btu per hour input per combustion unit.

b. Fuel-burning equipment for indirect heating or cooling with a capacity of less than one million Btu per hour input per combustion unit when burning coal, untreated wood or fuel oil. Used oils meeting the specification from 40 CFR 279.11 as amended through May 3, 1993, are acceptable fuels for this exemption.

c. Mobile internal combustion and jet engines, marine vessels and locomotives.

d. Equipment used for cultivating land, harvesting crops, or raising livestock other than anaerobic lagoons. This exemption is not applicable if the equipment is used to remove substances from grain which were applied to the grain by another person. This exemption is also not applicable to equipment used by a person to manufacture commercial feed, as defined in Iowa Code section 198.3, which is normally not fed to livestock, owned by the person or another person, in a feedlot, as defined in Iowa Code section 172D.1, subsection 6, or a confinement building owned or operated by that person and located in this state.

e. Incinerators and pyrolysis cleaning furnaces with a rated refuse burning capacity of less than 25 pounds per hour. Pyrolysis cleaning furnace exemption is limited to those units that use only natural gas or propane. Salt bath units are not included in this exemption.

f. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment.

g. Equipment or control equipment which reduces or eliminates all emission to the atmosphere. If a source wishes to

obtain credit for reductions under the prevention of significant deterioration requirements, it must apply for a permit for the reduction prior to the time the reduction is made. If a construction permit has been previously issued for the equipment or control equipment, the conditions of the construction permit remain in effect.

h. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless such equipment or control equipment also emits particulate matter, or any other regulated air contaminant (as defined in 22.100(455B)).

i. Construction, modification or alteration to equipment which will not result in a net emissions increase (as defined in 22.5(1) "f") of more than 1.0 lb/hr of any regulated air pollutant (as defined in 22.100(455B)). Emission reduction achieved through the installation of control equipment, for which a construction permit has not been obtained, does not establish a limit to potential emissions.

Hazardous air pollutants (as defined in rule 22.100) are not included in this exemption except for those listed in Table 1. Further, the net emissions rate INCREASE must not equal or exceed the values listed in Table 1.

Table 1

<u>Pollutant</u>	<u>Ton/year</u>
Lead	0.6
Asbestos	0.007
Beryllium	0.0004
Vinyl Chloride	1
Fluorides	3

This exemption is ONLY applicable to vertical discharges with the exhaust stack height 10 or more feet above the highest building within 50 feet. If a construction permit has been previously issued for the equipment or control equipment, the conditions of the construction permit remain in effect. In order to use this exemption, the facility must comply with the information submission to the department as described above.

The department reserves the right to require proof that the expected emissions from the source which is being exempted from the air quality construction permit requirement, in conjunction with all other emissions, will not prevent the attainment or

maintenance of the ambient air quality standards specified in 567—Chapter 28. If the department finds, at any time after a change has been made pursuant to this exemption, evidence of violations of any of the department's rules, the department may require the source to submit to the department sufficient information to determine whether enforcement action should be taken. This information may include, but is not limited to, any information that would have been submitted in an application for a construction permit for any changes made by the source under this exemption, and air quality dispersion modeling.

j. Residential wood heaters, cookstoves, or fireplaces.

k. Asbestos demolition and renovation projects subject to 40 CFR 61.145 as amended through January 16, 1991.

l. The equipment in laboratories used exclusively for nonproduction chemical and physical analyses. Nonproduction analyses means analyses incidental to the production of a good or service and includes analyses conducted for quality assurance or quality control activities, or for the assessment of environmental impact.

m. Storage tanks with a capacity of less than 10,570 gallons and an annual throughput less than 40,000 gallons.

n. Stack or vents to prevent escape of sewer gases through plumbing traps. Systems which include any industrial waste are not exempt.

o. A nonproduction surface coating process that uses only hand-held aerosol spray cans.

p. Brazing, soldering or welding equipment or portable cutting torches used only for nonproduction activities.

q. Cooling and ventilating equipment: Comfort air conditioning not designed or used to remove air contaminants generated by, or released from, specific units of equipment.

r. An internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft. For the purposes of this exemption, the manufacturer's nameplate rating at full load shall be defined as the brake horsepower output at the shaft.

s. Equipment that is not related to the production of goods or services and used exclusively for academic purposes, located at educational institutions (as defined in Iowa Code section 455B.161). The equipment covered under this exemption is limited to: lab hoods, art class equipment, wood shop equipment in classrooms, wood fired pottery kilns, and fuel-burning units with a capacity of less than one million Btu per hour fuel capacity. This exemption does not apply to incinerators.

t. Any container, storage tank, or vessel that contains a fluid having a maximum true vapor pressure of less than 0.75 psia. "Maximum true vapor pressure" means the equilibrium partial pressure of the material considering:

- For material stored at ambient temperature, the maximum monthly average temperature as reported by the National Weather Service, or
- For material stored above or below the ambient temperature, the temperature equal to the highest calendar-month average of the material storage temperature.

22.1(3) *Construction permits.* The owner or operator of a new or modified stationary source shall apply for a construction permit unless a conditional permit is required by Iowa Code chapter 455B or subrule 22.1(4) or requested by the applicant in lieu of a construction permit. Two copies of a construction permit application for a new or modified stationary source shall be presented or mailed to Department of Natural Resources, Air Quality Bureau, 7900 Hickman Road, Suite 1, Urbandale, Iowa 50322. The owner or operator of any new or modified industrial anaerobic lagoon or a new or modified anaerobic lagoon for an animal feeding operation other than a small operation as defined in rule 567-65.1 (455B) shall apply for a construction permit. Two copies of a construction permit application for an anaerobic lagoon shall be presented or mailed to Department of Natural Resources, Water Quality Bureau, Henry A. Wallace Building, 502 East Ninth Street, Des Moines, Iowa 50319.

a. *New equipment design in concept review.* If requested in writing, the director will review the design concepts of proposed new equipment and associated control equipment prior to application for a construction permit. The purpose of the review would be to determine the acceptability of the location of the proposed equipment. If the review is requested, the requester shall supply the following information:

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(1) Preliminary plans and specifications of proposed equipment and related control equipment.

(2) The exact site location and a plot plan of the immediate area, including the distance to and height of nearby buildings and the estimated location and elevation of the emission points.

(3) The estimated emission rates of any air contaminants which are to be considered.

(4) The estimated exhaust gas temperature, velocity at the point of discharge, and stack diameter at the point of discharge.

(5) An estimate of when construction would begin and when construction would be completed.

b. Construction permit applications. Each application for a construction permit shall be submitted to the department on the form "Air Construction Permit Application." Final plans and specifications for the proposed equipment or related control equipment shall be submitted with the application for a permit and shall be prepared by or under the direct supervision of a professional engineer registered in the state of Iowa in

conformance with Iowa Code chapter 542B. The application for a permit to construct shall include the following information:

(1) A description of the equipment or control equipment covered by the application;

(2) A scaled plot plan, including the distance and height of nearby buildings, and the location and elevation of existing and proposed emission points;

(3) The composition of the effluent stream, both before and after any control equipment with estimates of emission rates, concentration, volume and temperature;

(4) The physical and chemical characteristics of the air contaminants;

(5) The proposed dates and description of any tests to be made by the owner or operator of the completed installation to verify compliance with applicable emission limits or standards of performance;

(6) Information pertaining to sampling port locations, scaffolding, power sources for operation of appropriate sampling instruments, and pertinent allied facilities for making tests to ascertain compliance;

(7) Any additional information deemed necessary by the department to determine compliance with or applicability of rules 22.4(455B) and 22.5(455B); and

(8) Application for a case-by-case MACT determination. If the source meets the definition of construction or reconstruction of a major source of hazardous air pollutants, as defined in paragraph 22.1(1) "b," then the owner or operator shall submit an application for a case-by-case MACT determination, as required in subparagraph 23.1(4) "b"(1), with the construction permit application. In addition to this paragraph, an application for a case-by-case MACT determination shall include the following information:

1. The hazardous air pollutants (HAP) emitted by the constructed or reconstructed major source, and the estimated emission rate for each HAP, to the extent this information is needed by the permitting authority to determine MACT;

2. Any federally enforceable emission limitations applicable to the constructed or reconstructed major source;

3. The maximum and expected utilization of capacity of the constructed or reconstructed major source, and the associated uncontrolled emission rates for that source, to the extent this information is needed by the permitting authority to determine MACT;

4. The controlled emissions for the constructed or reconstructed major source in tons/yr at expected and maximum utilization of capacity to the extent this information is needed by the permitting authority to determine MACT;

5. A recommended emission limitation for the constructed or reconstructed major source consistent with the principles set forth in 40 CFR Part 63.43(d) as amended through December 27, 1996;

6. The selected control technology to meet the recommended MACT emission limitation, including technical information on the design, operation, size, estimated control efficiency of the

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control technology (and the manufacturer's name, address, telephone number, and relevant specifications and drawings, if requested by the permitting authority);

7. Supporting documentation including identification of alternative control technologies considered by the applicant to meet the emission limitation, and analysis of cost and non-air quality health environmental impacts or energy requirements for the selected control technology;

8. An identification of any listed source category or categories in which the major source is included.

(9) A signed statement that ensures the applicant's legal entitlement to install and operate equipment covered by the permit application on the property identified in the permit application. A signed statement shall not be required for rock crushers, portable concrete or asphalt equipment used in conjunction with specific identified construction projects which are intended to be located at a site only for the duration of the specific, identified construction project.

c. Application requirements for anaerobic lagoons. The application for a permit to construct an anaerobic lagoon shall include the following information:

(1) The source of the water being discharged to the lagoon;

(2) A plot plan, including distances to nearby residences or occupied buildings, local land use zoning maps of the vicinity, and a general description of the topography in the vicinity of the lagoon;

(3) In the case of an animal feeding operation, the information required in rule 567-65.15 (455B);

(4) In the case of an industrial source, a chemical description of the waste being discharged to the lagoon;

(5) A report of sulfate analyses conducted on the water to be used for any purpose in a livestock operation proposing to use an anaerobic lagoon. The report shall be prepared by using standard methods as defined in 567—60.2(455B);

(6) A description of available water supplies to prove that adequate water is available for dilution;

(7) In the case of an animal feeding operation, a waste management plan describing the method of waste collection and disposal and the land to be used for disposal. Evidence that the waste disposal equipment is of sufficient size to dispose of the wastes within a 20-day period per year shall also be provided;

(8) Any additional information needed by the department to determine compliance with these rules.

22.1(4) *Conditional permits.* The owner or operator of any new or modified major stationary source may elect to apply for a conditional permit in lieu of a construction permit. Electric power generating facilities with a total capacity of 100 megawatts or more are required to apply for a conditional permit.

a. Applicability determination. If requested in writing, the director will make a preliminary determination of nonattainment applicability pursuant to rules 22.4(455B) and 22.5(455B), based upon the information supplied by the requester.

b. Conditional permit applications. Each application for a conditional permit shall be submitted to the department in writing and shall consist of the following items:

(1) The results of an air quality impact analysis which characterizes preconstruction air quality and the air quality impacts of facility construction and operation. A quality assurance plan for the preconstruction air monitoring where required in accordance with 40 Code of Federal Regulations Part 58 as amended through July 18, 1997, shall also be submitted.

(2) A description of equipment and pollution control equipment design parameters.

(3) Preliminary plans and specifications showing major equipment items and location.

(4) The fuel specifications of any anticipated energy source, and assurances that any proposed energy source will be utilized.

(5) Certification that the preliminary plans and specifications for the equipment and related control equipment have been prepared by or under the direct supervision of a

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professional engineer registered in the state of Iowa in conformance with Iowa Code chapter 542B.

(6) An estimate of when construction would begin and when construction would be completed.

(7) Any additional information deemed necessary by the department to determine compliance with or applicability of rules 22.4(455B) and 22.5(455B).

This rule is intended to implement Iowa Code section 455B.133.

[illegible]

CFR: 40 C.F.R. 52.820(c)(43)

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PRM: 49 FR 45761 (11/20/84)

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State Proposal: None

State Final: 7/1/83

APDB File: IA-19

[illegible]

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[illegible]

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APDB File: IA-74

Description: This revision adds reference to “existing” sources and new or reconstructed major sources of HAPs, as well as reference to MACT.

[illegible]

CFR: 40 C.F.R. 52.820 (c)

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APDB File: IA-79

Description: Revisions include allowing a true minor source to begin construction prior to obtaining a permit subject to certain conditions; amending permit exemption requirements, amending permit application information required, and various minor clarification and corrections.

[illegible]

CFR: 40 C.F.R. 52.820 (c)

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APDB File: IA-89

Description: Revisions were made to subrules 22.1(3) and 22.1(3)"c"(3) pertaining to construction permits for anaerobic lagoons.

[illegible]

